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SOME RECENT PROBLEMS IN PUBLIC UTILITY VALUATION AND REGULATION

SUMMARY

The two factors, the rate base and the rate of return. The rules governing the court and commission decisions in valuation cases, 606.—Mostly questions of opinion, 607.—Ambiguity of the term “value.” “Investment” a better word for the purpose, 608.—Suggestion for handling appreciation as income, 610.—Consideration of the rate of return. Three criteria proposed, 612.—Too much dependence on “judicial notice.” Other delicate problems, 612.—A summary, 613.

The public service commission which is called upon to settle the size of the street-car fare or the rate to be charged for gas must consider two factors: the rate base, that is, the “value” of the property devoted to the public service; and the rate of return which is to be permitted on the investment. A very perfunctory examination of the reports of the public utility commissions will show that the rate base has been established with great care in almost every case, but that the rate of return is fixed in a very offhand manner with little or no evidence to support the conclusion reached.

The rules or principles which appear to govern the courts and commissions in recent valuation cases may be briefly summarized under the headings used in the volumes of the *Public Utility Reports Annotated*.

I. In general. Every change in market prices does not necessitate a revaluation. This was the rule during and after the war, but now the courts have decided in at least one case that present prices rather than so-called “normal” prices should govern and hence that a revaluation should be made when values were substantially affected.¹

II. Powers and duties of commission. A commission must give not only its conclusions, but also the details of the process by which it arrived at them.

III. Ascertainment of value or cost. Some of the commissions think that the original cost is the best measure of present value, but the courts have ruled that the reproduction cost must be considered.

IV. Accrued depreciation. When accrued depreciation has not been reimbursed, some commissions do not deduct it from the rate base, while others do.

V. Appreciation. A “moderate” appreciation when clearly shown to exist and when no “unjust” rate would result, is practically always allowed.

¹*Public Utility Reports, 1922 B*, p. 684. (Subsequent references will be abbreviated thus, *P. U. R. 1922 B*, p. 684. This article is intended primarily for economists, not lawyers, and references will be given, therefore, only for a few controversial issues.)

VI. Non-physical elements affecting value. No set percentage of construction cost should be allowed for interest during construction, but an estimate should be made in accordance with the facts in each case. Although there is some divergence of opinion, it seems to be the rule to allow a reasonable sum for the cost of promoting and financing. Contingencies and omissions are allowed for by the Indiana commission on the ground that omissions are inevitable in the most carefully made inventory, but this is contrary to the rule adopted by most of the commissions. Discount on securities and brokerage must as a rule be amortized and not added to the permanent capital value.

VII. Items and expenses chargeable to capital. In one peculiar case expenses of a law suit about a right of way were charged to capital.² Work under construction is ordinarily excluded from the value on which the company is permitted to earn, on the ground that interest during construction will form part of the capital value of the new property.

VIII. Valuation of particular kinds of tangible property. Property not used or useful is, of course, excluded, but the interpretation is liberal, so that property reasonably likely to be used in the near future is not excluded and some value is allowed for superseded or obsolescent property, if it is used at all or if it has not been paid for by the public through a depreciation allowance. The appreciation in the value of land is allowed in the valuation of public utilities. As for working capital, the rule has been to relate it to the amount of the expenses between times of income receipt. If advance payments by customers are sufficient to meet these expenses, no allowance is made to the company for working capital.

IX. Valuation of particular kinds of intangible property. It is very generally recognized that an allowance must be made for "going value." This allowance is determined by what is called the Wisconsin method, that is, by assuming that the going value is equal to the "unrequited early losses."³ However, the New York Public Service Commission, 2nd District, denies the existence of going value in the case of an unprosperous concern.⁴

A few of these principles are merely the answers to practical questions, such as: how much working capital does this business need? Most of them, however, fall into a distinctly different category. They are questions of opinion, judgment, or bias. The most important of these is: which cost or costs must be taken as the measure of value for rate-making purposes? The commissions, as the guardians of the public interest, are inclined to choose the lowest, just now usually the

²*P. U. R. 1920 B*, p. 37.

³*P. U. R. 1920 B*, p. 813.

⁴*P. U. R. 1920 C*, p. 264.

original cost; the companies seeking the highest possible base are better suited with the cost of reproduction during the present period of high prices; the courts as the protectors of private property lean strongly toward the reproduction-cost method. Yet, as has been noted above, there was an almost universal refusal to accept war prices as a basis for the computation of rate bases. The courts sought normal prices in five to ten year pre-war averages. Now with the persistence of the high prices this error is less frequent, but still the public utilities suffered from it through the whole war period. This war experience has revealed one of the greatest weaknesses of our present method of regulation in a glaring manner. The system is too inflexible. Revaluations are expensive and slow. The corporation is quite likely to be in the hands of the receiver before the commissions and courts realize that the value of the dollar has changed.

A second place where opinion is given free rein is in the allowance of appreciation. A "moderate" appreciation is to be allowed when no "unjust" rate will result, it is said. Does this really mean anything? If it were known what an unjust rate would be, it would be unnecessary to bother with the valuation at all.

The third question of opinion to be considered here relates to the allowance for going value. It has been definitely decided that there is such a thing as going-concern value different from good will. Furthermore this going value must be allowed for. In a manner quite inconsistent with the cost-of-reproduction method used for the valuation of the rest of the property the commissions and courts have estimated the going value as equal to the unrequited early losses. This is the actual cost method, but when a concern has never had the good fortune to become prosperous, the New York commission, at least, refuses to believe that there is any going value there. By a strange paradox, if a company has prospered from the first and has never had any early losses, it also is quite without going value.

As a consequence of this freedom of opinion in determining several of the elements which enter into the rate base, much uncertainty and risk is brought into public utility investment. For this risk the investor must be compensated. This means that in the long run the public will be called upon to pay in higher rates for the vagaries of the courts and commissions and that in the mean time the investors will feel aggrieved and the public service will suffer.

The primary cause of trouble in the determination of the rate base is the ambiguity of the concept of value held by the courts and commissions. This is the result of the survival of the classical economists' doctrine that the ultimate standard of value is cost. The inadequacy of this standard was realized by the classical economists themselves as regards what they called monopoly goods, that is, goods which are

not readily reproducible. Nevertheless, they thought that nearly the whole range of economic goods came under the law of cost. It is not necessary to show here that the only cost which can be proved to be related to the value of an object is the money cost and not the labor cost. If value could be shown to be equal to the money cost under free competition, then cost could fairly be taken as a measure of value for the public utility, but it must be noted that some of the most troublesome problems of public regulation relate to the valuation of land, which even the classical economists would not have thought of as subject to the law of cost. The value of land can be explained only by a consideration of its future uses. When the word "value" is used in rate-making cases, it is almost impossible to avoid reasoning in a circle. The more exact the use of the term becomes, the less appropriate is it in such cases. In regard to unprosperous concerns it is argued that no going value can exist; why does it not follow that in the case of very prosperous concerns a very great going value exists, as the earnings have quite clearly been made the criterion? The truth is that value depends on estimated future earnings or uses and the most rigorous attempts to avoid the thought are unavailing. Some of the commissions have realized this ambiguity in the use of the term and have referred to value in the ordinary sense of the word as market value, with the statement that the value for rate-making purposes was something different from market value. Others have decided to abandon the term "value" in favor of "fair amount," and the courts have held that this is a permissible substitution.⁵ However, the expression "fair amount" seems incomplete and if it implies "fair amount of value," as clearly it must, then little is gained by the substitution.

Since the term "value" should be rejected on account of its ambiguity and "fair amount" is not much better, another expression must be found which will be simple and exact. "Investment" is such a word. It conveys exactly the proper meaning and has the advantage over "fair amount" of not needing a special explanation whenever it is used. It plainly indicates the historical nature of the thing which is to form the base for rate making. It refers to what the investor has put into the property. The very use of the term creates a presumption of fair dealing. A fair return on his investment is all that any man can reasonably ask of the public.

Many benefits would result merely from the general adoption of this term. The investment is a fixed quantity until the investor changes it either by putting more money into the business or by retaining part of the earnings in the business. A definite rule would be established which would not fluctuate with the reasonableness of various individuals who have the privilege of choosing between the numerous and conflicting

⁵*P. U. R. 1920 C*, p. 326.

alternatives of the famous case of *Smyth vs. Ames*, where it is stated that, in finding the fair value of the property being used for the convenience of the public, "the original cost of construction, the amount expended in terminal improvements, the amount and market value of its stocks and bonds, the present as compared with the original cost of construction, the probable earning capacity of the property under particular rates prescribed by statute, and the sum required to meet operating expenses are all matters for consideration and are to be given such weight as may be just and right in each case. We do not say that there may not be other matters to be regarded in estimating the value of the property."⁶ Though it is true that, as a matter of fact, the authorities have pretty well settled down to the use of the cost-of-reproduction-less-depreciation method, still there is enough of uncertainty about it to add considerably to the risk in public utility investment. The removal of this risk would improve the position of the public utility securities on the market and enable the commissions to lower the rate of return without injustice to the security holders, for the capital value of their holdings would not be impaired.

Along with the use of the term "investment" would come naturally a more rational method of handling appreciation. One writer has suggested that once a value has been fixed upon, it should be considered that this value is the investment in the property and that no appreciation will be added to this in later years.⁷ He feels that the public would then get the benefit of the so-called unearned increment in land values. He claims that the investor would not be injured because he would know when he made his investment that no appreciation was to be allowed. Even if this suggestion were feasible, it would not be desirable. There is a better and simpler way and one more likely to be generally adopted when it is understood. The difficulty with the present method of treating appreciation is not that it recognizes the existence of appreciation but rather that it does not anticipate the appreciation in fixing the rate of return. It seems to be customary to fix a rate of return absolutely without regard to any increase in value of the property and then when the property comes up for a revaluation, a considerable appreciation is discovered which has never entered the income accounts. If appreciation can increase the capital value of the plant, then it must be income and should be treated as such. No one hesitates to call depreciation an expense merely because it does not involve a cash outlay, and no one should hesitate to call appreciation an item of income merely because it is not a cash receipt. The objection may be raised that this plan results in burdening the public with the payment of a return on a huge "unearned in-

⁶*Smyth vs. Ames*, 169 U. S., 46. Opinion delivered by Mr. Justice Harlan.

⁷Robert James McFall, *Railway Monopoly and Rate Regulation*, pp. 145-149.

crement." The answer to this is that the plan here proposed removes the "unearned" part of that accusation, for the returns obtained by the company from earnings would be diminished by the amount of the appreciation. Furthermore if the property became too valuable for the public utility use to which it was being put, this should be known so that a change could be made. A proper valuation of property is a guide for the economic use of the property. Finally it is inevitable that the courts will insist on the allowance of appreciation and the wise guardian of the public interest will recognize this early enough to take the appropriate measures in fixing the rate of return on this basis.

After it has been admitted that appreciation should be considered in rate making, it becomes necessary to examine more carefully into the nature of appreciation. There are at least three distinct sorts of value changes which enter into the problem. They are the long period changes in the value of money, the value phenomena of the business cycle, and the changes in the value of particular goods occasioned by special conditions governing their relative scarcity. From 1896 to May, 1920, we had continually rising prices and a depreciating dollar; this gave a nominal appreciation in many cases where no real appreciation existed. This fictitious appreciation is not the kind of appreciation which is to be treated as a form of income. Nevertheless even this kind cannot be neglected. The size of the value measuring stick has changed and the public utilities should not be expected to stand aside and say that a fifty cent dollar is the same thing as a hundred cent dollar. The amount of the investment should be expressed in terms of the present dollar. The only feasible method of doing this would be to take some official index number of wholesale prices, such as that of the Bureau of Labor Statistics, as an indicator of the value of money. When this showed that the value of money had gone up or down, the figure representing the investment would be made to fluctuate by a like percentage. Increases made in this way should not be counted as appreciation, nor decreases as depreciation. If these numerical revaluations or recomputations were made every year, the cyclical fluctuations would be taken care of as well as the long-period changes, but it might be better to attain justice in the shorter periods by flexibility in the rate of return allowed.

The third value change, the change in the value of particular goods occasioned by changes in the conditions governing their relative scarcity, is the only one which produces true appreciation. When the value of land increases because of the growth of population, and the value of timber increases because of the depletion of the forest reserves and also because of the growth of population, this value increase constitutes a real appreciation and should be treated as income in the manner described in a previous paragraph. This is not a discussion of account-

ing methods, and therefore no attempt will be made to describe in detail the computations necessary to make these principles effective.

So far the discussion has been concerned chiefly with valuation or the rate base. The rate of return deserves some special consideration. The following quotation from the decision of the Arizona Corporation Commission, delivered April 13, 1922, is a fair example of the way in which the rate is too frequently decided upon:

We are of the opinion that 9 per cent of the value found for rate-making purposes may be accepted as a measure of reasonableness of net operating revenues without prejudicing rates on one hand, and without discouraging enterprise or placing restrictions in the matter of securing new capital on the other.⁸

In this there is absolutely no intimation of the method of arriving at 9 per cent as the rate satisfying the conditions set. The commission was "of the opinion" that this rate satisfied the conditions.

Other commissions have been more explicit. Three criteria have been proposed: the rate generally deemed reasonable by courts and commissions; the rate earned by other similar enterprises; and the rate at which capital can be secured in the money market. The first of these could hardly be said to have any value except as confirmatory of a judgment already reached.

For this purpose it is introduced as in the decision of the Indiana Public Service Commission of January 26, 1922:

A reasonable return, under conditions that exist today, is not less than 7 per cent. Most courts and commissions hold that 8 per cent is a reasonable return.⁹

The second and third criteria are both involved in the decision of the West Virginia Supreme Court of Appeals of December 14, 1921:

It is argued that the rate of net return ought to be sufficient to induce capital to engage in such public enterprises. Is not 6 per cent net, clear of taxes and all operating expenses, including a sum equal to 2 per cent for depreciation, as good or better than returns from most enterprises of a similar character?¹⁰

In another opinion delivered on the same day the court (Lynch, J.) says:

As it seems to me, a return is not reasonable when limited to interest upon indebtedness and a mere dividend on stock without allowance for the additional risk assumed and entailed in a public business.¹¹

The one thing that stands out clearly in all the decisions is that they depend upon "judicial notice" of the facts of business altogether too

⁸*P. U. R. 1922 C*, p. 670.

⁹*P. U. R. 1922 C*, p. 377.

¹⁰*P. U. R. 1922 C*, pp. 85, 86.

¹¹*P. U. R. 1922 C*, p. 573.

much. Evidence should be presented not only of the local rates for money but also of the rates in New York, particularly if the company is large enough to float its securities there. There are a number of delicate problems concerning the reward to be given the well-managed company, the influence of the proportion of stocks and bonds on the credit of the company and the rate of return needed, and the desirability of consolidation of public utility companies as warranting lower rates of returns. These cannot be solved within the limits of this paper. All that is insisted on here is that definite evidence should always be introduced to fix the rate with the greatest exactness possible, for a little difference in the rate is equivalent to a very considerable difference in the rate base.

It is believed that the changes which have been suggested in this paper would result in the simplification of the problem of public regulation and improve the credit of the public utility companies to the benefit of the public and the satisfaction of the conservative investor. The amount of the investment would not vary with the whim of courts and commissions. Appreciation would not be a troublesome issue. Real appreciation would be allowed for without injustice to the public or the company. The rate of return would be established by scientific study of the security market and not by guess.

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